REMARKS/ARGUMENTS

Apparatus claims 1, 2, 4 and 5 and method claims 6, 7, 9 and 10 remain in this application for examination. New apparatus claims 11-13 and method claims 14-16 have been added to recite the larger power range "10mW to 1W" independently.

Response to Arguments:

Applicants express their sincere appreciation for the Examiner's suggestions for amendments to method claims 6, 7, 9 and 10that will overcome the rejection. Of the method claims not rejected under 35 U.S.C. §§102 and 103, Applicants have amended the method claims by adopting the suggestions of the Examiner, which amendments include the limitations of "not using an external photosenstizer"; "selecting a laser light source with a wavelength between 1.26μm and 1.27μm", and "illuminating the macula", as well as, removing the language "with minimal thermal effect on the cornea and crystalline lens of the eye."

Claims 1, 2, 4-7 and 9 and 10 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicants have removed reference to "applying a therapeutic laser to the retina in the eye of a patient" and substituted the terminology of "illumination of the macula of the laser light beam" from method claim 6.

With respect to the limitation in claim 1 of "generating intracellular cingulated oxygen directly and in sufficient quantity to occlude abnormal retinal vessels," it is submitted that this limitation is implicitly described in the specification in the last sentence of paragraph [0019] of the published patent application, which paragraph is concerned with the context of dynamic photo-therapy, that is in turn in the context of the claim. Moreover, it is mentioned in paragraph [0029], last sentence, that the light beam in the Applicants' claimed invention acts directly on the oxygen contained in the vessels to generate singulat oxygen that is known as being the "main agent serving to occlude normal retinal vessels". It is therefore submitted that the dimension of occlusion of

abnormal retinal vessels in apparatus claim 1 and method claim 5 is disclosed in the specification as originally filed.

Claims 4, 5, 9 and 10 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 4 and 9 have been amended to depend from a currently presented claim rather than a cancelled claim by depending from claims 1 and 7, respectively, while the term "laser light source" has been used in claims 4 and 9 so as to have proper antecedent basis in independent claims 1 and 6, respectively.

Claim Rejections Under 35 U.S.C. §102:

Claims 1 and 2 have been rejected under 35 U.S.C. §102(b) as anticipated by Lin '082. Applicants respectfully traverse this rejection.

As explained in our response to the previous Office Action, in the context of the invention it is important that the therapeutic light beam be a non-thermal laser beam. This is a limitation which does not occur in Lin '082 and therefore a rejection under 35 U.S.C §102 is not sustainable because such a rejection requires that all limitations occur on a single reference.

In the context of the invention, a non-thermal laser beam is a beam which does not burn the retina (see, e.g., paragraph [0018] of the published patent application.) This is unlike the laser used for photocoagulation or transpupilary thermal therapy (see, e.g., paragraph [0021] of the published patent application). Due to the fact that the laser beam must initially cross four successive layers (cornea, aqueous humor, crystalline lens and vitrous humor) in order to reach the macular (center in the retina), the beam must have a certain power. However, this power must be such that the four successive layers are not damaged by the laser beam. The most sensible and sensitive elements with respect to the thermal effect of the laser beam are the cornea and crystalline lens.

As already explained in the Reply to the previous Office Action, there are two different effects, i.e., thermal effects and physical chemical modifications. It is important that the physical-

chemical modifications occur without the occurrence of thermal effects that cause damage.

In order to achieve this goal, it is necessary to consider the absorption based on resonant transition of the O_2 (oxygen) molecule. As previously explained, a 1% wave-length variation when in a resonant transition, results in going out of resonant transition and falling into a non-resonant transition with potential high and uncontrolled thermal effects that can cause damage. Accordingly, the physician utilizing Lin '082 must be prevented from adjusting the wave-length to a value outside of the claimed interval of 1.26μm to 1.27μm.

This is why the apparatus of this invention must comprise an emitter which is not in control of or adjustable by the user, wherein the emitter is a therapeutic laser light beam "presenting an emission wave-length line only in a range of 1.26μm to 1.27μm." There must not be any small deviation in the emitter which would lead to transformation of the emitted non-thermal laser beam into a thermal and damaging beam. Lin '082 discloses an apparatus which does not allow the emission wave-length to be limited to the claimed range of 1.26μm to 1.27μm. Consequently, Lin does not allow the generation of singlet oxygen in sufficient quantity to occlude abnormal retinal vessels without the risk of falling out of the claimed resonant transition context and thus damaging the eye of the patient.

Accordingly, claim 1 is not anticipated by Lin '082 because it provides an emitter "presenting an emission wave-length lying only in the range of 1.26μm to 1.27μm." Accordingly, it is respectfully submitted that the rejection of claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by Lin '082 should be withdrawn, since in order for such a rejection to be sustainable, every limitation must occur in a single reference. This is clearly not the case in a rejection relying on Lin '082.

Claim Rejections Under 35 U.S.C. §103:

Claims 4 and 5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Lin '082 in view of Rice et al. '309. Applicant respectfully traverses this rejection.

In that Rice et al. '309 does not limit the emission wave-length only to the range of 1.26μm to 1.27μm, Rice et al. does not cure the deficiencies of Lin '082 as a reference against Applicant's invention. Thus whatever else Rice et al. '309 teaches, Applicants' claims 4 and 5 are allowable for the same reason as Applicant's claim 1. Thus the rejection under 35 U.S.C. §103 of claims 4 and 5 should be withdrawn in that the rejection does not establish a *prima facie* case of obviousness.

Double Patenting:

Applicants' new independent claims 11 and 14, which place claims 2 and 7 in independent form, respectively, are allowable for the same reasons as claims 1 and 6. The power range 10mW to 1W of claims 2 and 7 is larger than the power range of claims 1 and 6, but since claims 2 and 7 each contain the limitation of keeping the emission wave-length to the range of 1.26μm to 1.27μm, claims 11 and 14 are allowable for the same reasons as claims 1 and 6. Since new claims 12 and 13, and new claims 15 and 16 depend from claims 11 and 14, they are allowable for the same reasons as claims 11 and 14.

In that this is a full and complete response to the Office Action of September 25, 2008, it is respectfully requested that this application be allowed and passed to issue. If the Examiner for any reason feels that a personal conference might expedite prosecution of this application, the Examiner is respected requested to telephone the undersigned locally.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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